In [1]:
```
a=10
b=20
print(a+b)
```

30

In [2]:
```
a=int(input())
b=int(input())
print(a+b)
```

15
15
30

In [1]:
```
for x in range(2):
    a=int(input())
    b=int(input())
    print("Total is : ",a+b)
    print("---------------------")
```

90
20
Total is : 110

90
33
Total is : 123

In [2]:
```
for x in "ABC":
    a=int(input())
    b=int(input())
    print("Total is : ",a+b)
    print("---------------------")
```

90
12
Total is : 102

33
44
Total is : 77

55
66
Total is : 121

In [3]:

```python
a="ABC"
for x in a:
    a=int(input())
    b=int(input())
    print("Total is : ",a+b)
    print("----------------------")
```

```
52
55
Total is :  107
----------------------
88
85
Total is :  173
----------------------
44
55
Total is :  99
----------------------
```

In [2]:

```python
ab=int(input("Please Enter the Range: "))
for x in range(ab):
    a=int(input())
    b=int(input())
    print("Total is : ",a+b)
    print("----------------------")
```

```
Please Enter the Range: 2
90
33
Total is :  123
----------------------
55
66
Total is :  121
----------------------
```

```python
ab=int(input("Please Enter the Range: "))
for x in range(5,ab):
    a=int(input())
    b=int(input())
    print("Total is : ",a+b)
    print("----------------------")
```

```
Please Enter the Range: 7
55
44
Total is :  99
----------------------
66
55
Total is :  121
----------------------
```

In [6]:

```python
ab=int(input("Please Enter the Start Value: "))
ac=int(input("Please Enter the End Value: "))
for x in range(ab,ac,5):
    a=int(input())
    b=int(input())
    print("Total is : ",a+b)
    print("----------------------")
```

```
Please Enter the Start Value: 5
Please Enter the End Value: 51
2
3
Total is :  5
----------------------
4
5
Total is :  9
----------------------
6
5
Total is :  11
----------------------
33
22
Total is :  55
----------------------
11
22
Total is :  33
----------------------
33
44
Total is :  77
----------------------
55
66
Total is :  121
----------------------
666
33
Total is :  699
----------------------
22
22
Total is :  44
----------------------
22
11
Total is :  33
----------------------
```

```python
ab=int(input("Please Enter the Start Value: "))
ac=int(input("Please Enter the End Value: "))
for x in range(ab,ac,5):
    print(x)
```

```
Please Enter the Start Value: 5
Please Enter the End Value: 51
5
10
15
20
25
30
35
40
45
50
```

Working with If else Statment

```python
m=int(input("Enter the Marks: "))

if m>0 and m<35:
    print("You are Failed....")
else:
    print("You are Passed...")
```

```
Enter the Marks: 34
You are Failed....
```

```python
for x in "A  B":
    print("This is me...",x)
    m=int(input("Enter the Marks: "))

    if m>0 and m<35:
        print("You are Failed....")
    else:
        print("You are Passed...")
```

```
This is me... A
Enter the Marks: 55
You are Passed...
This is me...
Enter the Marks: 44
You are Passed...
This is me...
Enter the Marks: 11
You are Failed....
This is me... B
Enter the Marks: 25
You are Failed....
```

```python
for x in "AB":
    print("This is me...",x)
    m=int(input("Enter the Marks: "))
    if m>0 and m<35:
        print("You are Failed....")
```

```
This is me... A
Enter the Marks: 5
You are Failed....
This is me... B
Enter the Marks: 55
```

Working with List

```python
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
print(name)
```

```
['Sagar', 'Mahi', 'Rohit', 'Virat', 'Pritam']
```

```python
print(type(name))
```

```
<class 'list'>
```

In [18]:

```
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
print(len(name))
```

5

In [19]:

```
print(name[0])
```

Sagar

In [20]:

```
ab=name[0]
print(ab)
```

Sagar

In [21]:

```
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
ab=name[:3]
print(ab)
```

['Sagar', 'Mahi', 'Rohit']

In [22]:

```
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
ab=name[5:3]
print(ab)
```

[]

In [23]:

```
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
ab=name[5:3]
print(ab)
```

['Virat', 'Pritam']

In [24]:

```
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
ab=name[2:-2]
print(ab)
```

['Rohit']

In [25]:

```python
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
ab=name[-4:-1]
print(ab)
```

['Mahi', 'Rohit', 'Virat']

In [26]:

```python
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
ab=name[:]
print(ab)
```

['Sagar', 'Mahi', 'Rohit', 'Virat', 'Pritam']

In [27]:

```python
# Insert in List

name=["Sagar","Mahi","Rohit","Virat","Pritam"]
name.append("Hardik")
print(name)
```

['Sagar', 'Mahi', 'Rohit', 'Virat', 'Pritam', 'Hardik']

In [28]:

```python
ab=input("Enter the Value..")
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
name.append(ab)
print(name)
```

Enter the Value..Pooja
['Sagar', 'Mahi', 'Rohit', 'Virat', 'Pritam', 'Pooja']

In [29]:

```python
ab=input("Enter the Value..")
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
name.insert(1,ab)
print(name)
```

Enter the Value..Poonam
['Sagar', 'Poonam', 'Mahi', 'Rohit', 'Virat', 'Pritam']

In [30]:

```python
ab=input("Enter the Value..")
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
name.insert(-1,ab)
print(name)
```

Enter the Value..Seema
['Sagar', 'Mahi', 'Rohit', 'Virat', 'Seema', 'Pritam']

In [31]:

```
ab=input("Enter the Value..")
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
name.insert(4,ab)
print(name)
```

```
Enter the Value..Rahul
['Sagar', 'Mahi', 'Rohit', 'Virat', 'Rahul', 'Pritam']
```

In [32]:

```
ab=input("Enter the Value..")
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
name.insert(4,ab)
print(name)
```

```
Enter the Value..Mahi
['Sagar', 'Mahi', 'Rohit', 'Virat', 'Mahi', 'Pritam']
```

In [33]:

```
name=["Sagar","Mahi","Rohit","Virat","Pritam"]
name.pop()
print(name)
```

```
['Sagar', 'Mahi', 'Rohit', 'Virat']
```

In [35]:

```
name=["Sagar","Mahi","Rohit","Mahi","Virat","Pritam"]
name.remove("Mahi")
print(name)
```

```
['Sagar', 'Rohit', 'Mahi', 'Virat', 'Pritam']
```

In [36]:

```
name=["Sagar","Mahi","Rohit","Mahi","Virat","Pritam"]
name.clear()
name
```

Out[36]:

```
[]
```

In [39]:

```
name=["Sagar","Mahi","Rohit","Mahi","Virat","Pritam"]
del name
print()
```

In [41]:

```python
city=["Pune","Mumbai","Nashik","Nagpur","Latur"]
for x in city:
    if x=="Nashik":
        a=20
        b=30
        print("This is Total:",a+b)
    else:
        print("This is not Nashik: ",x)
```

```
This is not Nashik:  Pune
This is not Nashik:  Mumbai
This is Total: 50
This is not Nashik:  Nagpur
This is not Nashik:  Latur
```

In [43]:

```python
Passwords=["Pune","Mumbai","Nashik","Nagpur","Latur"]
pas=input("Enter the passward")
for x in Passwords:
    if x==pas:
        print("This is Old: ",x)
        break
    else:
        print("This is new: ",x)
```

```
Enter the passwardMumbai
This is new:  Pune
This is Old:  Mumbai
```

In [45]:

```python
Passwords=["Pune","Mumbai","Nashik","Nagpur","Latur"]
pas=input("Enter the passward")
for x in Passwords:
    if x==pas:
        print("This is Old: ",x)
    else:
        print("I am here...")
```

```
Enter the passwardPune
This is Old:  Pune
I am here...
I am here...
I am here...
I am here...
```

```python
city=["Pune","Mumbai","Nashik","Nagpur","Latur"]
New_city=[]
for x in city:
    ab=x+"007"
    New_city.append(ab)
print(New_city)
```

```
['Pune007', 'Mumbai007', 'Nashik007', 'Nagpur007', 'Latur007']
```

```python
gen=["Pooja","Sagar","Sahil","Seema","Suraj","Meena"]
girls=["Pooja","Seema","Meena"]
boys=["Sagar","Sahil","Suraj"]
boys_hostel=[]
girls_hostel=[]

for x in gen:
    if x in girls:
        girls_hostel.append(x)
    else:
        boys_hostel.append(x)


print("girls_hostel:",girls_hostel)
print("boys_hostel:",boys_hostel)
```

```
girls_hostel: ['Pooja', 'Seema', 'Meena']
boys_hostel: ['Sagar', 'Sahil', 'Suraj']
```